5. (New) The routing switch of Claim 1 wherein said one or more processors for controlling said routing switch to monitor a message from a neighboring node comprises said one or more processors controlling said routing switch to detect a quality of a link from said neighboring node.

6. (New) The routing switch of Claim 5 wherein said quality of said link is determined based on a bit error rate.

7. (New) The routing switch of Claim 5 wherein said quality of said link is determined based upon received optical power.

8. (New) The routing switch of Claim 1 wherein said one or more processors for controlling said routing switch to detect a change in said message from a previous message comprises said one or more processors controlling said routing switch to detect that said neighboring node has an address different from a previous address of said neighboring node.

9. (New) The routing switch of Claim 1 wherein said one or more processors for controlling said routing switch controls said routing switch to update a routing table within said routing switch based upon said topology change of said network.

10. (New) The routing switch of Claim 1 wherein said change in said topology comprises the addition or deletion of a node in the network.

11. (New) The routing switch of Claim 1 wherein said one or more processors for controlling said routing switch controls said routing switch to store in memory information regarding the status of said neighboring node upon receiving a change in said session identifier.

12. (New)   The routing switch of Claim 11 wherein said information regarding the status of said neighboring node is replaced with new status information only after the topology has been stabled for a threshold period of time.

13. (New)   The routing switch of Claim 2 wherein said one or more processors for controlling said routing switch to detect messages from other nodes comprises said one or more processors controlling said routing switch to detect said other nodes' unique addresses.

14. (New)   The routing switch of Claim 2 wherein said change in said topology comprises the addition or deletion of a node in the network.

15. (New)   The routing switch of Claim 2 wherein said routing table is updated only after the topology has been stabled for a threshold period of time.

16. (New)   The method of Claim 3 wherein said monitoring by each node comprises detecting said neighboring node's unique address.

17. (New)   The method of Claim 3 wherein said monitoring by each node comprises detecting a quality of a link from said neighboring node.
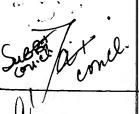
18. (New)   The method of Claim 17 wherein said quality of said link is determined based on a bit error rate.

19. (New)   The method of Claim 17 wherein said quality of said link is determined based upon received optical power.

20. (New)   The method of Claim 3 wherein said detecting a change in said message from a previous message comprises detecting that said neighboring node has an address different from a previous address of said neighboring node.

21. (New)   The method of Claim 3 wherein said change in said topology comprises the addition or deletion of a node in the network.